New York State Department of Transportation Yellow Flag NB2222W002

By: Sahadeo Bhagwandin Flag Date: March 25, 2022

Superseding Information:

This flag supersedes: YF NB2197W026

Structure Information

BIN: 1065318 Region: 11 - NEW YORK CITY

Feature Carried: 278I278IX2M23027 County: KINGS

Feature Crossed: 6TH AVENUE Political Unit: City of NEW YORK
Orientation: 8 - NORTHWEST Approximate Year Built: 1962

Posted Load Matches Inventory: Yes

Bridge Load Posting (Tons): Not Posted for Load

Primary Owner: New York State Department of Transportation

Primary Maintenance Responsibility: 12 - State - Subcontracted to another Party

Typical or Main Span Type: 3 - Steel, 02 - Stringer/Multi-Beam or Girder

This Bridge is not a Ramp Number of Spans: 322

Verbal Notification Information

Person Notified: Heinz Joachim, P.E. Date: March 25, 2022 10:00:00 AM

Of: NYSDOT Region 11

Signature Information

Signature: Sahadeo Bhagwandin, P.E. 088239-1 Date: April 07, 2022

Reviewed By: Robert Kemp Date: April 07, 2022

Attachments: 6

Flag Date: March 25, 2022

Flagged Elements

Parent Element	Element	Total Quantity	Unit
Span Number : 221			
	107 - Steel Open Girder/Beam	989	ft
	PR831 - Steel Beam End	42	each

Flagged Condition Description

This Yellow Flag No. NB2228W015 is superseding Yellow Flag No. NB2158W010

Location: Span 168 Stringer S3 at Pier 167.

Description: The end of Stringer S3 in Span 168 at Pier 167 exhibits severe section loss at the lower web and bottom flange. The stringer exhibits two corrosion holes for 16"L x 3"H and 1-1/2" (previously 1") diameter in the lower web above the bottom flange (starting at the end of the stringer) with knife edging along the holes with an average of 0.34" remaining thickness measured (RTM) resulting in an overall section loss of 20% for 2" wide surrounding the holes (no change from previous) - (Photo 2). The right stiffener above the bearing exhibits one corrosion hole for 10"H x up to full width at the bottom of the stiffener (no change) - (Photo 3). Also, the first stiffener (counting from Pier 167) at the right face of the stiffener exhibits one corrosion hole for 4"H x full width at the bottom of the stiffener. In addition, the bottom flange of the stringer adjacent to the end side of the bearing plates at Pier 167 exhibits one corrosion hole for 5"L x 2"W at the left side bottom flange and one corrosion hole for 10"L x 2"W at the right side bottom flange with up to 40% section loss surrounding both holes (no change) - (Photo 4).

The stringer rests atop of cantilevered lateral support beam which is framed into the web of Girder G14 with connection angles. The lower web of the support beam exhibits a 2" diameter corrosion hole with up to 60% section loss in the surrounding areas above the bottom flange (no change). The top flange angle of the lateral support beam below Stringer S3 exhibits 1 out of 5 missing bolts. The connection angles between the support beam and the web of Girder G14 are in good condition. (Photo 4)

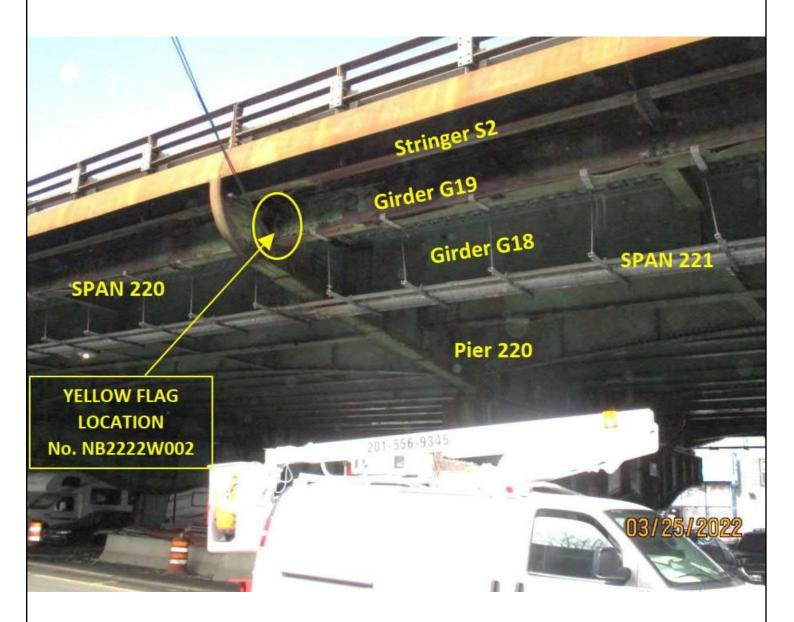
There has been no significant change since previous inspection.

Notes:

- 1. The adjacent Girder G14 in Span 168 at Pier 167 is in good condition with previously installed reinforcing steel plates installed at the girder web.
- 2. The flagged stringer directly supports the curb and railing posts above at the intersection with the ramp.
- 3. This flagged condition is located above the center lane on 3rd Avenue EB roadway and was accessed using 30ft bucket truck and double left lane closure.

Flag Photographs

Photo Number: 1 Photo Filename: Photo 1-4436.jpg



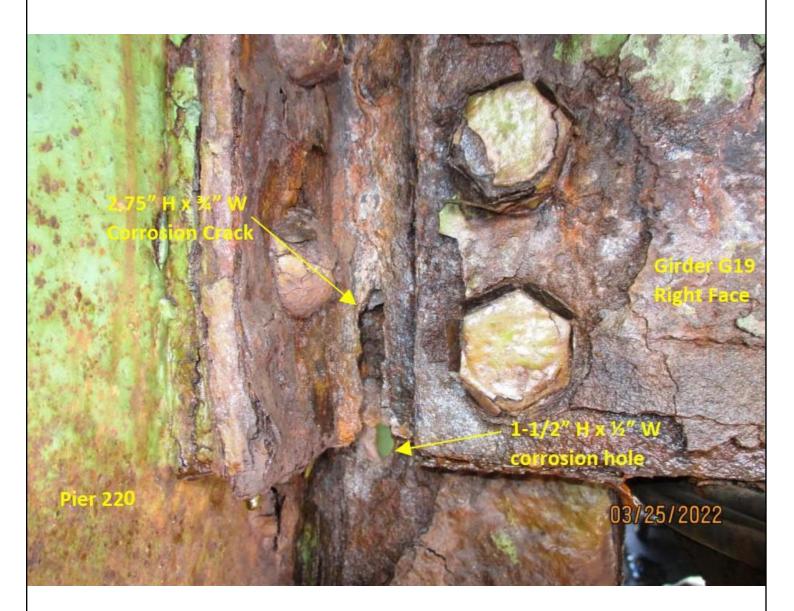
Attachment Description: Span 221, Girder G19 at Pier 220. General view of flagged location at pier cap connection. Looking begin left.

Photo Number: 2 Photo Filename: Photo 2-4439.jpg



Attachment Description: Span 221, Girder G19 at Pier 220. General view of the flagged location showing a 2.75" H x 3/4" W vertical corrosion crack at the lower fillet section, corrosion hole and up to 60% section loss at remaining section of connection angle. Looking begin left.

Photo Number: 3 Photo Filename: Photo 3-4444 - edit.jpg



Attachment Description: Span 221, Girder G19 at Pier 220. Close-up view of the flagged location showing corrosion crack, hole in connection angles and heavy section of the right connection angle. Looking left.

Photo Number: 4 Photo Filename: Photo 4-4450.jpg



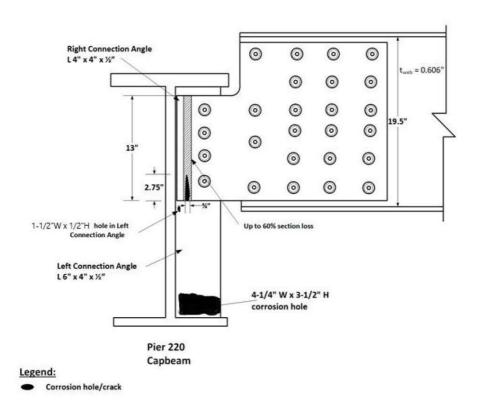
Attachment Description: Span 221, Girder G19 at Pier 220. Close-up view of 4-1/4" W x 3-1/2" H corrosion hole at base of left side stiffener connection angle. Looking begin right.

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Photo Number: 5 Photo Filename: NB2222W002 Sketch edit.jpg

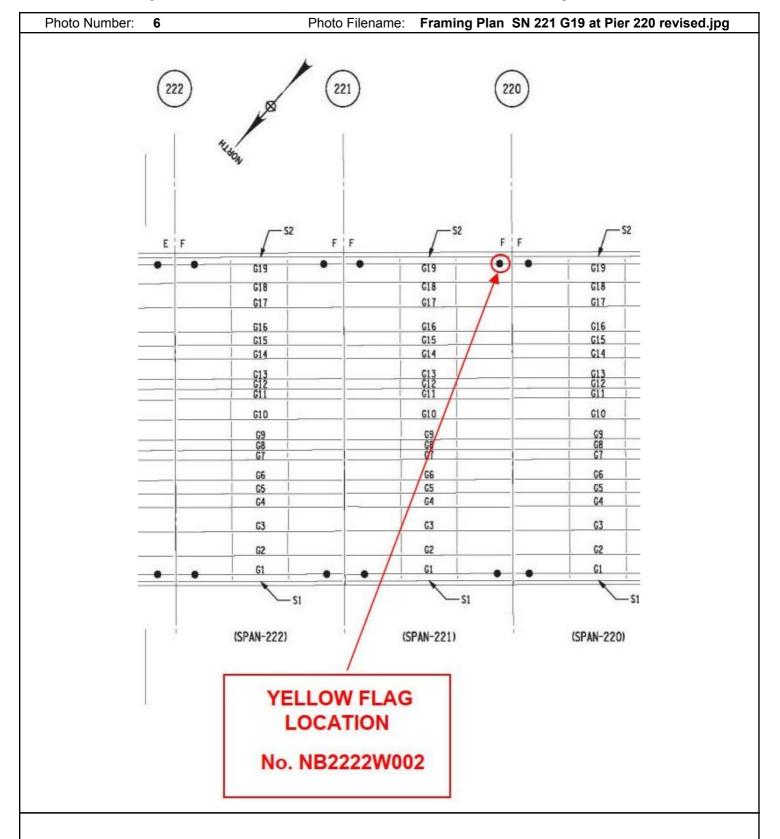
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Span 221, Girder G19 at Pier 220 (Looking left)
N.T.S.

Attachment Description: Span 221 G19 at Pier 220 Sketch



Attachment Description: Span 221 G19 at Pier 220 Framing Plan